

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
WEIR 161-KV TRANSMISSION LINE
CHOCTAW COUNTY, MISSISSIPPI

Proposed Action and Need

To improve power reliability and meet growing power demands in the area, the Tennessee Valley Authority (TVA) proposes to construct a new 161-kilovolt (kV) transmission line to serve a new substation to be located near Weir, Mississippi. The new substation would be constructed by 4-County Electric Power Association (EPA). The proposed transmission line would connect to the TVA Red Hills-Sturgis 161-kV line north of Ackerman, Mississippi. The new line would run approximately 7.7 miles to the new substation and would be located on 100-foot-wide right-of-way. Six new access roads would be required for construction and maintenance access.

TVA has reviewed the proposed action and reasonable alternatives in an Environmental Assessment (EA) in accordance with its procedures implementing the National Environmental Policy Act (NEPA). This EA is incorporated by reference.

Alternatives

Two feasible alternatives, i.e., Alternative A (the No Action Alternative) and Alternative B (the Action Alternative), were developed. These are described below.

Under the No Action Alternative, TVA would not construct the proposed transmission line. Consequently, the local 13-kV distribution line could become overloaded, and 4-County EPA might not be able to provide adequate service to its members. Increasing demand for power, especially during peak demand periods, would likely result in local system outages.

Under the Action Alternative, TVA would construct a connection (also known as a “tap”) to the Red Hills-Sturgis No. 1 161-kV Transmission Line. This connection would be north of Ackerman, Mississippi. Switches would be installed on either side of the connection. TVA would also construct a new 161-kV transmission line from the tap point to the planned 4-County EPA substation near Weir, Mississippi. In addition, TVA would install remote control and monitoring equipment.

Impacts Assessment

Under the No Action Alternative, the proposed transmission line would not be built. Consequently, there would be no potential environmental effects related to construction and operation of a transmission line. Under the Action Alternative, the proposed transmission line would be built. A summary of the potential effects of adopting this alternative follow.

The proposed transmission line would be located in a predominately rural setting. However, the route would cross several county roads, and portions of the right-of-way would be visible from these roads. Line construction and right-of-way clearing would cause some visual effects. The line would be supported by single steel-pole structures, which would weather over time and resemble existing structures. Overall, visual impacts would be insignificant.

Clearing of new right-of-way would create additional edge habitat for wildlife. However, the local area is already highly fragmented, and additional habitat fragmentation would be insignificant. Construction of the new transmission line is not expected to have significant effects on common wildlife species. The red-cockaded woodpecker, an endangered species, is known to occur in Choctaw County. Although some marginal foraging habitat may exist in pine stands near the line route, field surveys failed to identify any of the birds or their nest trees. Consequently, the proposed action would not affect any federally listed as threatened or endangered terrestrial animal species.

Right-of-way clearing would convert about 75 acres of mixed forest to early successional habitat. No uncommon plant communities were found along the project route, and forested habitats are common in the area. Thus, potential effects to common plant life would be insignificant. No federally listed plant species are known to occur in the project area, and field surveys did not detect any such species. Thus, there would be no effects to any federally listed as threatened or endangered plants. Right-of-way clearing and maintenance are not expected to facilitate the spread of invasive plants.

Construction Best Management Practices (BMPs) and other guidelines (see Appendices B, C, D, and E in the EA) would be applied during line construction and right-of-way maintenance. Implementation of these safeguards would reduce the potential for adverse effects to surface water and aquatic life. Thus, potential effects to aquatic life would be insignificant.

The proposed transmission line route is within 3 miles of four managed areas. However, the nearest of these areas is approximately 2 miles away. Because of the distance, no effects to natural areas or managed areas are expected. No streams on the Nationwide Rivers Inventory are located within 3 miles of the project.

No formal recreation facilities would be affected by the proposed project. Potential effects to informal recreation would be minor and insignificant.

The proposed transmission line right-of-way would cross several permanent streams. The stream protection measures described in Appendices B, C, D, and E would be implemented during construction and maintenance. Proper implementation of these measures is expected to result in only minor and temporary effects to surface waters. No cumulative effects to surface water quality are anticipated.

Approximately 2.2 acres of wetlands would be affected by right-of-way clearing. Specifically, these forested wetlands would be converted to scrub-shrub emergent wetland habitat. Clearing of these forested wetlands would be done under Nationwide Permit No. 12. Because forested wetlands are common in the local area, the minor loss in function associated with conversion of these forested wetlands to scrub-shrub or emergent habitats is not considered significant.

Construction BMPs would be applied during construction and right-of-way maintenance to prevent groundwater contamination. Thus, potential effects to groundwater are expected to be insignificant.

The proposed transmission line would cross several floodplains. Placement of structures in these floodplains is not expected to increase flood elevations or alter the flow-carrying capacity of streams. Thus, potential effects to floodplains would be minor and insignificant.

Three previously recorded historic structures are located within the Area of Potential Effect of the project. However, TVA determined that these properties are ineligible for inclusion on the National Register of Historic Places. The State Historic Preservation Officer (SHPO) concurred with this determination. Thus, the proposed project would not affect any historic resources.

Mitigation

The following routine measures would be applied during construction and operation of the proposed transmission line:

- Appropriate BMPs would be implemented during construction activities.
- During construction and operation of the proposed transmission line, the environmental quality protection specifications as described in Appendices B, C, D, and E of the attached EA would be implemented to reduce the potential for adverse environmental effects.

With the implementation of these measures and safeguards, potential adverse effects are expected to be insignificant.

Public and Intergovernmental Review

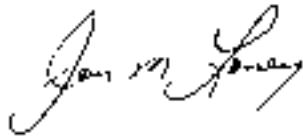
The Mississippi SHPO was contacted in accordance with the provisions of the National Historic Preservation Act regarding concurrence with TVA's determination of no effect to historic properties. The SHPO concurred with that determination in a letter of August 9, 2005.

Conclusion and Findings

The proposed project would not affect any species federally listed as threatened or endangered. TVA determined that the proposed undertaking would not have the potential to affect any historic properties that are potentially eligible, are eligible, or are currently listed on the National Register of Historic Places.

Placement of transmission line support structures in the 100-year floodplain is consistent with Executive Order 11988, as there would be no increase in the flood hazard. Potential effects to wetlands would be minor and insignificant, and the action complies with Executive Order 11990. Similarly, potential effects to visual character, recreational opportunities, and natural areas would be insignificant. Because appropriate measures would be implemented to protect surface water and groundwater quality, potential effects to water quality and aquatic life would be insignificant. Solid waste would be generated, but not in amounts that would adversely affect local landfill capacity. No significant air pollution would be generated. The proposed action would not disproportionately affect any minority or economically disadvantaged groups and would be consistent with Executive Order 12898 (Environmental Justice).

Environmental Policy and Planning's NEPA Administration staff have reviewed the subject EA and determined that the potential environmental consequences of TVA's proposed transmission line structure replacement have been addressed adequately in the EA. Based on the findings in the EA, including implementation of the required mitigation, TVA concludes that the proposed action is not a major federal action significantly affecting the quality of the environment. Accordingly, an Environmental Impact Statement is not required.



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Date Signed